

CHAPTER 15 SMOKE CONTROL SYSTEMS

SIFC-1501 GENERAL

SIFC-1501.1 Scope. The requirements of this chapter and IBC-1704.14 shall apply for all smoke control systems.

IBC-1704.14 Special inspection for smoke control. Smoke control systems shall be tested by a special inspector.

IBC-1704.14.1 Testing scope. The test scope shall be as follows:

1. During erection of ductwork and prior to concealment for the purposes of leakage testing and recording of device location.
2. Prior to occupancy and after sufficient completion for the purposes of pressure difference testing, flow measurements, and detection and control verification.

SIFC-1501.2 Special inspectors. Special inspections and tests for smoke control systems shall be conducted by qualified individuals, agencies or firms approved by the **Fire Protection Systems Testing Section**, Fire Prevention Division of the Fire and Rescue Department on behalf of the building official. The **SIER** for smoke control systems might be different from the **SIER** for other special inspections.

IBC-1704.14.2 Qualifications. Special inspection agencies for smoke control shall have expertise in fire-protection engineering, mechanical engineering and certification as air balancers.

SIFC-1501.3 Inspections. Special inspections for smoke control systems shall assess, document and verify the following systems/elements:

- automatic dampers
- control air tubing/DDC wiring
- control diagrams and sequences
- fan belts
- exhaust fan components
- power: normal and standby

SIFC-1501.4 Tests. Tests shall document and verify the adequate performance of:

- control elements and sequences
- control air tubing/ DDC wiring
- control devices
- dampers
- detection devices and their tolerances
- doors
- ducts and shafts
- fans
- inlets and outlets, including sizes and positions

SPECIAL INSPECTIONS: Implementation in Fairfax County (2000)

- pressurized stair enclosures
- smoke zone or area boundary elements/ barriers
- response times
- leakage of boundary or barrier elements, including doors and partitions.
- power: normal and standby

All tests, including failed tests and subsequent follow-up re-tests and corrective actions, shall be recorded and form part of the final report.

SIFC-1502 COMPLETION OF SMOKE CONTROL SYSTEMS

Final reports shall verify compliance with all portions of IBC-909.18, IBC-909.19 and IBC-909.20, as applicable. Upon completion of smoke control systems, the **SIER** for smoke control systems shall, after review and approval by the **AR** and the **Fire Protection Systems Testing Section**, Fire Prevention Division of the Fire and Rescue Department, submit a completion letter to **FCCSS** and shall indicate the date of completion on the final report of special inspections.